Amendments to the Claims

This listing of the claims will replace all prior versions, and listings, of claims in this application.

Listing of Claims

1. **(Currently Amended)** An isolated nucleic acid molecule comprising the nucleotide sequence of SEQ ID NO:1, or [[a]]the complement thereof, wherein said nucleic acid molecule encodes a polypeptide having 6-phosphogluconolactonase activity.

2-3. **(Canceled)**

4. **(Currently Amended)** An isolated nucleic acid molecule which encodes a polypeptide comprising the amino acid sequence of SEQ ID NO:2 and wherein the polypeptide has 6-phosphogluconolactonase activity.

5. **(Currently Amended)** An isolated nucleic acid molecule which hybridizes to the complement of [[a]]the nucleic acid molecule consisting of SEQ ID NO:1, in 6X SSC at 45°C, followed by one or more washes in 0.2X SSC, 0.1% SDS at 50-65°C, and wherein said nucleic acid molecule encodes a polypeptide having 6-phosphogluconolactonase activity.

6. **(Currently Amended)** An isolated nucleic acid molecule comprising (a) a nucleotide sequence which has at least 90% identity with the nucleotide sequence of SEQ ID NO:1, wherein said nucleic acid molecule encodes a polypeptide having 6-phosphogluconolactonase activity, or (b) the complement of (a)~~thereof~~.

7-8. **(Canceled)**

9. **(Previously Presented)** An isolated nucleic acid molecule comprising the nucleic acid molecule of any one of claims 1 and 4-6 and a nucleotide sequence encoding a heterologous polypeptide.

10. **(Original)** A vector comprising the nucleic acid molecule of claim 1.

11. **(Original)** The vector of claim 10, which is an expression vector.

12. **(Previously Presented)** A host cell transformed with the expression vector of claim 11.

13. **(Original)** The host cell of claim 12, wherein said cell is a microorganism.

14. **(Original)** The host cell of claim 13, wherein said cell belongs to the genus *Corynebacterium* or *Brevibacterium.*

15-16. **(Canceled)**

17. **(Previously Presented)** A method of producing a polypeptide encoded by an expression vector comprising the nucleic acid molecule of any one of claims 1 and 4-6, comprising culturing a host cell transformed with said vector in an appropriate culture medium to, thereby, produce the polypeptide.

18-24. **(Canceled)**

25. **(Currently Amended)** A method for producing a fine chemical, comprising culturing a cell ~~containing a~~ transformed with the vector of claim 11 such that the fine chemical is produced.

26. **(Original)** The method of claim 25, wherein said method further comprises the step of recovering the fine chemical from said culture.

27. **(Canceled)**

28. **(Original)** The method of claim 25, wherein said cell belongs to the genus *Corynebacterium* or *Brevibacterium.*

29. **(Previously Presented)** The method of claim 25, wherein said cell is selected from the group consisting of: *Corynebacterium glutamicum, Corynebacterium herculis, Corynebacterium lilium, Corynebacterium acetoacidophilum, Corynebacterium acetoglutamicum, Corynebacterium acetophilum, Corynebacterium ammoniagenes, Corynebacterium fujiokense, Corynebacterium nitrilophilus, Brevibacterium ammoniagenes, Brevibacterium*

flavum, Brevibacterium ketosoreductum, Brevibacterium linens, Brevibacterium parafinoliticum, and those strains set forth in Table 3.

30. **(Canceled)**

31. **(Original)** The method of claim 25, wherein said fine chemical is selected from the group consisting of: organic acids, proteinogenic and nonproteinogenic amino acids, purine and pyrimidine bases, nucleosides, nucleotides, lipids, saturated and unsaturated fatty acids, diols, carbohydrates, aromatic compounds, vitamins, cofactors, polyketides, and enzymes.

32. **(Original)** The method of claim 25, wherein said fine chemical is an amino acid.

33. **(Currently Amended)** The method of claim 32, wherein said amino acid is [[drawn]]selected from the group consisting of: lysine, glutamate, glutamine, alanine, aspartate, glycine, serine, threonine, methionine, cysteine, valine, leucine, isoleucine, arginine, proline, histidine, tyrosine, phenylalanine, and tryptophan.

34-38. **(Canceled)**

39. **(Previously Presented)** The isolated nucleic acid molecule of claim 6, wherein the nucleotide sequence has at least 95% identity to the nucleotide sequence of SEQ ID NO:1.